UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,164	06/26/2001	Benjamin J. Levitt	BVOCP022	5527

7590   08/26/2004

BEVOCAL, INC.
685 CLYDE AVENUE
MOUNTAIN VIEW,, CA   94043-2213

EXAMINER
LERNER, MARTIN

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/894,164	LEVITT ET AL.
Office Action Summary	Examiner	Art Unit
	Martin Lerner	2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 to 23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 to 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 October 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to because it is difficult to see the legends in Figure 1. It is requested that Applicants magnify Figure 1 so that it fits the page and the legends can be seen.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, Applicants will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

        The following title is suggested: Speech Recognition for Recognizing Addresses

with Grammars.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

4.   Claims 1, 3 to 9, 19, 20, and 23 are rejected under 35 U.S.C. 102(e) as being

anticipated by *Sasaki et al.*

        Regarding independent claims 1, 19, and 20, *Sasaki et al.* discloses a speech

recognition method, system, and computer program product, comprising:

        "receiving an utterance including at least two components" – voice data are fed to

word recognizer 11 where the voice input is processed to output a group of words that

correspond to words registered in a dictionary (column 4, lines 35 to 38: Figure 1);

"identifying matching between each of the components of the utterance and grammars" – a word dictionary 33 is searched to find a word corresponding to each candidate word, and a category of the word is determined and inputted (column 5, lines 8 to 28: Figure 3); a word category is a "grammar";

"combining each instance of a match of a first one of the components with each instance of a match of a second one of the components to generate a plurality of grammar expressions" – if a sentence structure evaluation is properly performed, a selection priority is placed on the score of a series of words; if it is judged that there are series of words having a high score, those series of words can be picked up (column 5, line 56 to column 6, line 3: Figure 3: Step M7); sentence structure evaluation involves a match of word components in a sentence; a plurality of candidate series of words are generated ("a plurality of grammar expressions") (column 8, lines 4 to 19);

"recognizing the received utterance utilizing the grammar expressions" – at a final evaluation stage M9, candidates 1, 2, and 3 are selected as three appropriate series of words, and since the series of words 1 correctly represents the user's initial input, the user confirms his intention by affirming the first talk-back (column 8, lines 43 to 60: Figure 3: Step M9).

Regarding independent claim 23, *Sasaki et al.* discloses a speech recognition method, further comprising:

"scoring the grammar expressions" – a distribution of scores given to each series of words is calculated (column 5, lines 41 to 55: Figure 3: Steps M6 and M7).

"comparing the results of operation (e) with a database of content" – candidates are evaluated from the standpoint of meaning as well as sentence structure as relating to a set scenario; evaluation tables ("a database of content") are provided for each scenario (column 5, lines 29 to 40; column 8, lines 20 to 42);

"discarding the results based on the score and the comparison" – it is implicit that when a user denies or does not select one of a series of words, the result is discarded (column 8, lines 4 to 60).

Regarding claim 3, *Sasaki et al.* discloses a distribution of scores given to each series of words is calculated (column 5, lines 41 to 55: Figure 3: Steps M6 and M7).

Regarding claims 4, 6, and 7, *Sasaki et al.* discloses the system talks back to the user contents of three appropriate series of words one by one for the user's confirmation (column 8, lines 43 to 48).

Regarding claims 5 and 9, *Sasaki et al.* discloses candidate series of words are provided as a list based upon scores (column 8, lines 4 to 42); all candidates including candidates denied or not selected are contained in the list.

Regarding claim 8, it is implicit that when a user denies or does not select one of a series of words, the result is discarded (column 8, lines 4 to 60).

5.   Claims 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by *Class et al.*

Class et al. discloses a method and product for recognizing speech, comprising:

"receiving an utterance indicative of an address" – the user enters the desired

location by speech input (column 8, lines 5 to 8: Figure 2: Step 1030); speech input is

for street names and addresses (column 7, lines 8 to 36: Figure 1: E6 and E8);

"recognizing the received utterance" – the speech input is transferred to the

speech recognition device (column 8, lines 8 to 10: Figure 2: Step 1040);

"comparing results of the recognition with a database of addresses" – the speech

input is compared with a basic vocabulary that was loaded (column 8, lines 10 to 11:

Figure 2: Step 1040); a basic vocabulary represents a database of street names and

addresses;

"discarding results if the comparison fails" – when the desired entry cannot be

found, the user is informed by speech output that the street name or place name could

not be found, and the system returns to a wait state (column 10, lines 11 to 20: Figure 4:

Step 1500); implicitly, results are discarded if none of the entries is satisfactory.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Sasaki et*

al. in view of *Janigan*.

Sasaki et al. omits discarding duplicate grammar expressions. However, Janigan

teaches a system for eliminating duplicate entries from a mailing list by comparing

significant portions of names and addresses of two records for the purpose of avoiding

sending duplicate solicitation letters even if two records do not match exactly. (Abstract;

Column 6, Lines 12 to 35; Column 2, Lines 37 to 46) It would have been obvious to one

having ordinary skill in the art to eliminate duplicate address records as suggested by

Janigan in the method and apparatus for selecting candidate word series in speech

recognition of Sasaki et al. for the purpose of correcting and simplifying an address

database.

8.   Claims 10 to 13 and 15 to 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sasaki et al. in view of Zavoli et al.

Concerning claims 10 to 13 and 15 to 16, Sasaki et al. discloses recognition

candidates may be a name of a place (column 5, lines 12 to 17), but does not expressly

say recognition candidates are representative of an address including a street name

and address number or two street names describing an intersection. However, Zavoli et

al. teaches speech recognition with map data, where cross street names or digit and

streets names are recognized to display a map. (Column 6, Line 31 to Column 7, Line

43: Figure 3) The objective is to make a system easy to use that is advantageous to

recognize locations on a map. (Column 2, Lines 28 to 32) It would have been obvious

to one having ordinary skill in the art to select candidate word series in speech

recognition as taught by Sasaki et al. where the candidate word series are street

names, street numbers, or describe an intersection as suggested by *Zavoli et al.* for the purpose of making a system that is easy to use and recognizes locations on a map.

Concerning claims 17 to 18, *Sasaki et al.* discloses a device for selecting appropriate words, which selects appropriate words series (column 4, lines 44 to 57), and the series of words are stored in a list (column 8, lines 4 to 20); implicitly, the series of words are cached during recognition processing for subsequent stages of recognition processing (Figures 3 and 4).

9.   Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Sasaki et al.* in view of *Zavoli et al.* as applied to claim 10 above, and further in view of *Class et al.*

Zavoli et al. does not say that an address includes a city and state. However, it is well known that an address includes components of a city and state, in addition to a street and number. *Class et al.* suggests a street address may be limited by a city and state to resolve ambiguity. (Column 11, Lines 17 to 23) It would have been obvious to one having ordinary skill in the art to include a city and a state in an address combination for the purpose of resolving ambiguity, and because is well known that an address includes components for a city and state.

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.
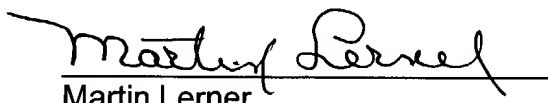
Junqua, Sabourin et al., Rühl, and Emam et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (703) 308-9064. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML
8/17/04

Martin Lerner
Examiner
Group Art Unit 2654